

REMARKS

1. Status of claims

After entry of the above amendment, claims 1-19 are pending.

2. Support for amendment

The above amendment finds support in the specification at pp. 7-10 and 19-27 (Examples 1-3) and Figures 1-2 and 7-8. No new matter has been added by this amendment.

3. Claim rejections under 35 U.S.C. § 102

The Examiner rejected claims 1-3 and 7-8 under 35 U.S.C. § 102(b) as being anticipated by Erlanger et al., US 6,593,137 (“Erlanger”). In view of the above amendment, Applicants submit the basis for this rejection has been removed.

The Examiner alleged Erlanger discloses an antibody which is specific for a fullerene or derivative thereof. However, the present claims, as amply supported by the specification and the figures, are directed to an antigen-binding moiety which is specific for a molecule other than a fullerene or derivative thereof. Erlanger is silent concerning the antibodies specific for molecules other than a fullerene or derivative thereof. Erlanger’s reference to a covalent linkage between fullerenes and a specific monoclonal antibody is both speculative and directed, within the context of Erlanger, to covalent linkage between a fullerene and a monoclonal antibody specific for the fullerene. Erlanger’s teaching of detectable labels is both directed to labels for an antibody specific for a fullerene and is directed to radioactive isotopes, which are plainly excluded from the scope of the present invention at p. 11, lines 18-21. (The Examiner’s statement that lanthanides are recited in a Markush group in claims 7 and 14 is not correct

concerning the present application). Therefore, Erlanger does not teach every element of the pending claims, and Applicants request this rejection of claims 1-3 and 7-8 be withdrawn.

4. *Claim rejections under 35 U.S.C. § 103*

The Examiner rejected claims 1-20 under 35 U.S.C. § 103(a) as being unpatentable over Erlanger in view of Williams, J.A., et al., *Int. J. Radiat. Oncol. Biol. Phys.* 1990 Sep; 19(3):633-642 (“Williams”) and Østensen et al., US 6,375,931 (“Østensen”). In view of the above amendment, Applicants submit the basis for this rejection has been removed.

Erlanger, as discussed above, teaches antibodies specific for fullerenes. Williams teaches the use of radiolabeled antibodies, such as ZME018, for the treatment of cancers, but makes no mention of fullerenes or non-radioisotopic therapeutic agents. Østensen teaches therapeutic compounds, such as anti-cancer drugs, “which may if desired be coupled to a site-specific vector having affinity for specific cells, structures or pathological sites,” and also teaches the use of fullerenes to produce microbubbles. Østensen makes no mention of antibodies or antigens, as determined by a search for the terms “antibod” or “antigen” in an HTML copy of Østensen maintained by the Office, <http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnethtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=6,375,931.PN.&OS=PN/6,375,931&RS=PN/6,375,931>, accessed August 10, 2006.

No combination or modification of Erlanger, Williams, and Østensen can render the present claims obvious. Williams teaches the use of radiolabeled antibodies to treat cancer, but provides neither motivation nor any expectation of success for the skilled artisan to use non-radioisotopic therapeutic agents, alone or in conjunction with fullerenes, to treat cancer. There

exists no motivation to use a radiolabeled antibody of Erlanger in the method of Williams, because the radiolabeled antibodies of Erlanger are specific for fullerenes, not cancer cells, and would therefore not be expected to be effective in treating cancer. Østensen teaches contrast agents that may contain therapeutic molecules and may also contain fullerenes, as discussed above, but it does not teach the use of antibodies. The only antibodies taught by the references are Erlanger's antibodies against fullerenes and Williams' against cancer cells, which would not guide the skilled artisan to consider antibodies linked to fullerenes and specific against other molecules or cells.

Therefore, none of the references, alone or in any combination, teach the composition of the present claims. Therefore, Applicants request this rejection of pending claims 1-19 be withdrawn.

5. *Claim rejections under obviousness-type double patenting*

The Examiner provisionally rejected claims 1-5 on the grounds of nonstatutory obviousness-type double patenting over claims 1-5 of copending Application. No. 10/623,190. Applicants request deference of this provisional rejection until such time as a set of allowed claims are established in either the present application or copending Application No. 10/623,190.

6. *Conclusion*

Applicants submit all pending claims 1-19 are in condition for allowance. The Examiner is invited to contact the undersigned patent agent at (713) 934-4065 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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